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WHAT IS CLAIMED:

- 1. A computer system, comprising a neural network or plurality thereof trained for diagnosing endometriosis.
- 2. A method for diagnosing endometriosis in a subject, comprising:

querying and examining the patient to assess the answers to at least three of the following questions: past history of endometriosis, number of births, dysmenorrhea, age, pelvic pain, history of pelvic surgery, smoking and if yes, the number of packs/day, medication history, number of pregnancies, number of abortions, abnormal PAP smear/dysplasia, pregnancy hyperplasia, genital warts and diabetes; and

based upon the results of the answers determining whether the patient has endometriosis.

- 15 3. A computer system, comprising a neural network or plurality thereof trained for assessing the risk of delivery within a selected time period, wherein the time period is within seven or fourteen days of performing a biochemical test to measure fetal fibronectin in a sample from a pregnant subject or the time period is prior to thirty five weeks of gestation.
 - 4. The system of claim 3, wherein the time period is within seven days of performing a biochemical test to measure fetal fibronectin.
 - 5. The system of claim 3, wherein the time period is within or fourteen days of performing a biochemical test to measure fetal fibronectin.
 - 6. The system of claim 3, wherein the time period is prior to thirty five weeks of gestation.